

Date: Tuesday, 12/5/2006 8:20:22 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BRACKET ASSEMBLY
Job Number	: 29821		
Estimate Number	: 10291		
P.O. Number	: N/A	Part Number	: D3183044
This Issue	: 12/5/2006 S.O. No. : N/A	Drawing Number	: D3183 REV C1
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : MACHINED PARTS	Drawing Revision	: C1
Previous Run	: 28829	Material	: N/A
Written By	: <i>[Signature]</i>	Due Date	: 1/5/2007
Checked & Approved By	: <i>[Signature]</i> 06/12/05	Qty:	8 Um: Each
Comment	: Est Rev: Pick: A 04.02.18 New issue KJ/DS		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M174B2000X01500	17-4 SS Bar
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Comment: Qty.: 0.4812 f(s)/Unit Total: 3.8497 f(s)

Material: 17-4 SS Bar per AMS 5604/5643

(M17-4-B1.500x02.000)

Identify for D3183-4

Batch: M101422X5 pieces

M14579X3 1.4436

inf 07/01/17 8

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW

Cut blanks: (1.500" x 2.000") 5.500" long

SD/inf 07/01/17 8

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3183-4 as per Folio FA322 and Dwg D3183

Identify as D3183-4

2-Deburr

3-Scribe batch number

SD/inf 07/01/17 8

(PTG)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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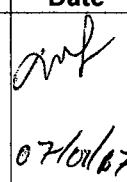
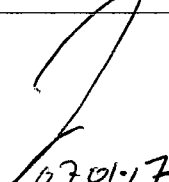
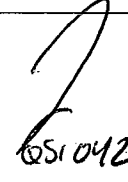
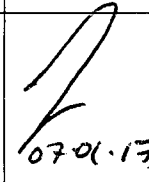
Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SD/inf 07/01/17 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/01/19

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/01/16	3	the drill broke inside the piece.	 QSI042	Scrap: replace	 07/01/17	 07/01/17	 QSI042	 07/01/17

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 29821

Part Number: D3183044

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.L 07/01/17

8

6.0

D312121

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3121-21

Bolt B29828

ml 07/01/17

16

7.0

D3183045

Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3183-045 Bearing Ass

B30254

ml 07/01/17

16

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3183-043 as per Dwg D3183.

ml 07/01/17

8

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

MS 07/01/17

8

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: S7412

CP 07/01/18 (8) PC 7/01/11

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/01/19

Job Completion



C207/01/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	29821
Description: Bracket		Part Number:	D3183-4
Inspection Dwg: D3183	Rev: C1	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.190	+/-0.030	R.190	/			
R0.063	+/-0.010	R.063	/			
0.182	+/-0.010	.183	/			
0.070	+/-0.010	.070	/			
0.100	+/-0.010	.100	/			
Ø0.201 x 0.100	+/-0.010	Ø.201 x .100	/			
0.182	+/-0.010	.183	/			
5.32	+/-0.030	5.320	/			
5.036	+/-0.010	5.035	/			
2.120	+/-0.010	2.120	/			
1.290	+/-0.010	1.290	/			
0.365	+/-0.010	.365	/			
0.218	+/-0.010	.218	/			
1.030	+/-0.010	1.030	/			
1.90	+/-0.030	1.90	/			
1.012	+/-0.010	1.012	/			
Ø0.201 x 0.100	+/-0.010	Ø.201 x .100	/			
0.182	+/-0.010	.182	/			
0.786	+/-0.010	.786	/			
Ø0.392	+0.002/-0.000	Ø.392	/			
R0.19	+/-0.030	R.190	/			
3.954	+/-0.010	3.954	/			
0.162	+/-0.010	.162	/			
R0.19	+/-0.030	R.190	/			
R0.25	+/-0.030	R.025	/			
4.26	+/-0.030	4.260	/			
2.800	+/-0.030	2.810	/			
Calculated dimension						
0.162	+/-0.010	.162	/			
0.615	+/-0.010	.610	/			
0.435	+/-0.010	.435	/			
0.200	+/-0.010	.200	/			
0.381	+/-0.010	.380	/			
0.032	+/-0.010	.032	/			

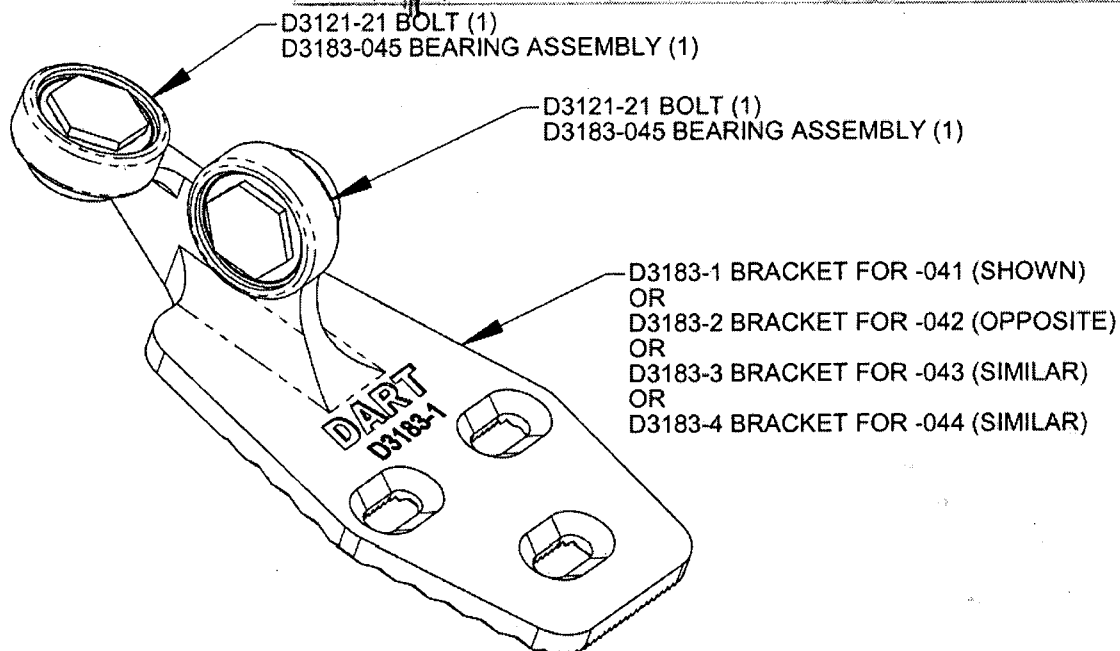
Measured by: SA	Audited by: Ep	Prototype Approval:	N/A
Date: 07.01.15	Date: 07.01.15	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.12	New Issue P/O D3183-044	KJ/RF	
B	04.03.15	Changes as per revision C	KJ/JLM/RF	
C	04.06.15	Dimension 2.800 was 2.080; removed 1.155, 0.36 dimensions	KJ/JLM	
D	06.03.09	Dwg Rev update	KJ/JLM	

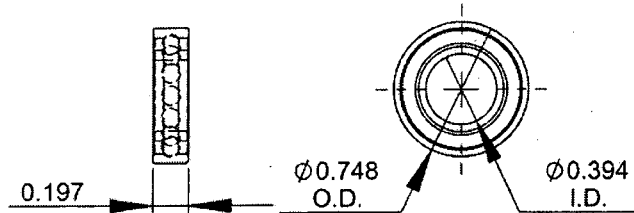


DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A.	03.01.24	NEW ISSUE	
B.	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C.	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.09	0.830 WAS 0.850	

RELEASED
04.03.01

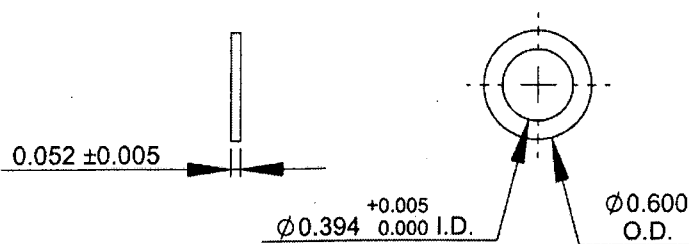


D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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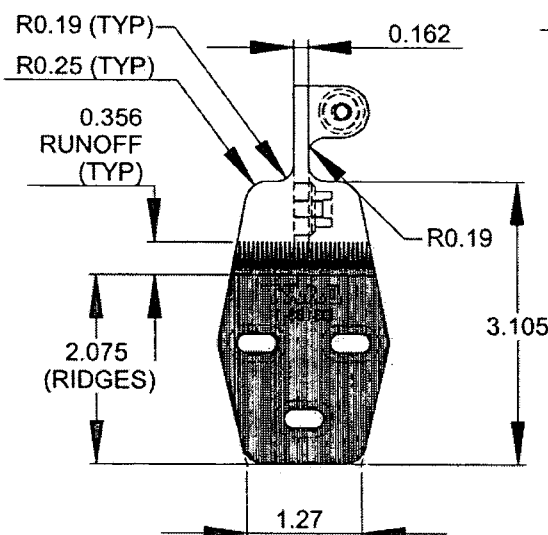
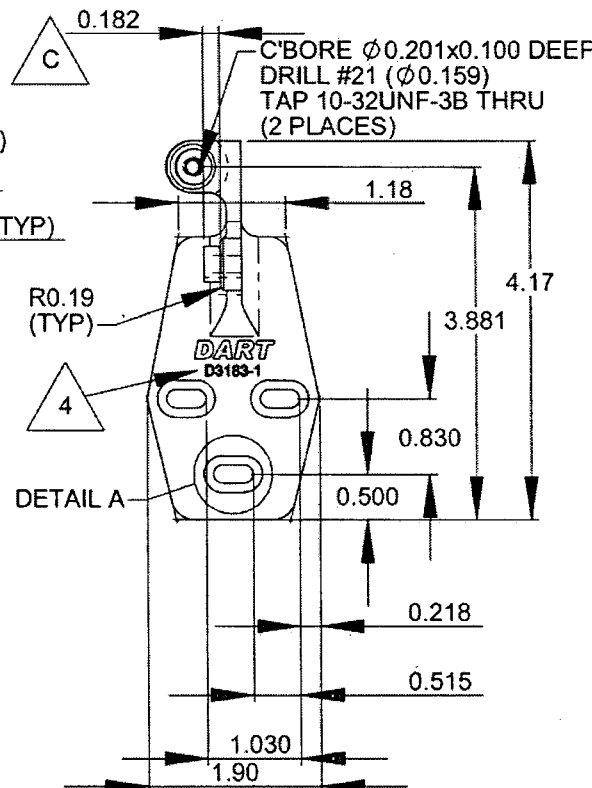
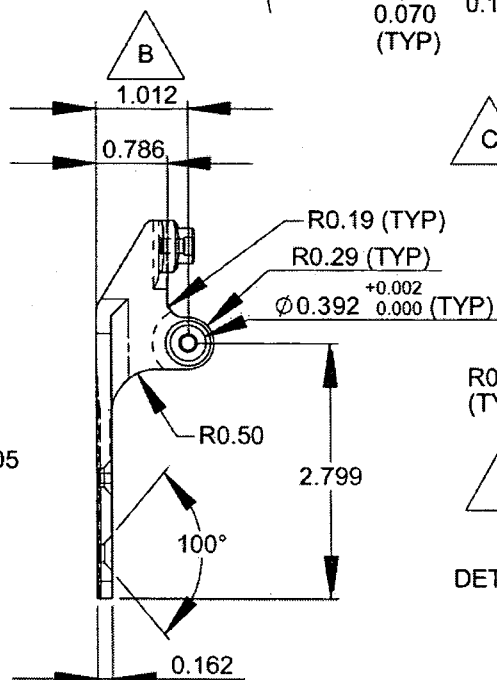
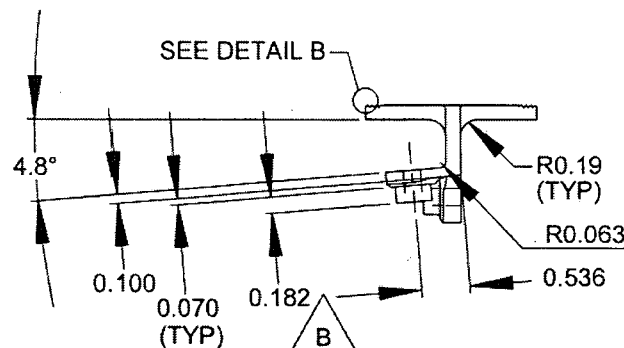
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DATE	04.02.17	DRAWING NO. D3183
TITLE	BRACKET ASSEMBLY	REV. C
SCALE	1:2	SHEET 2 OF 4

RELEASED
04.03.01



**D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

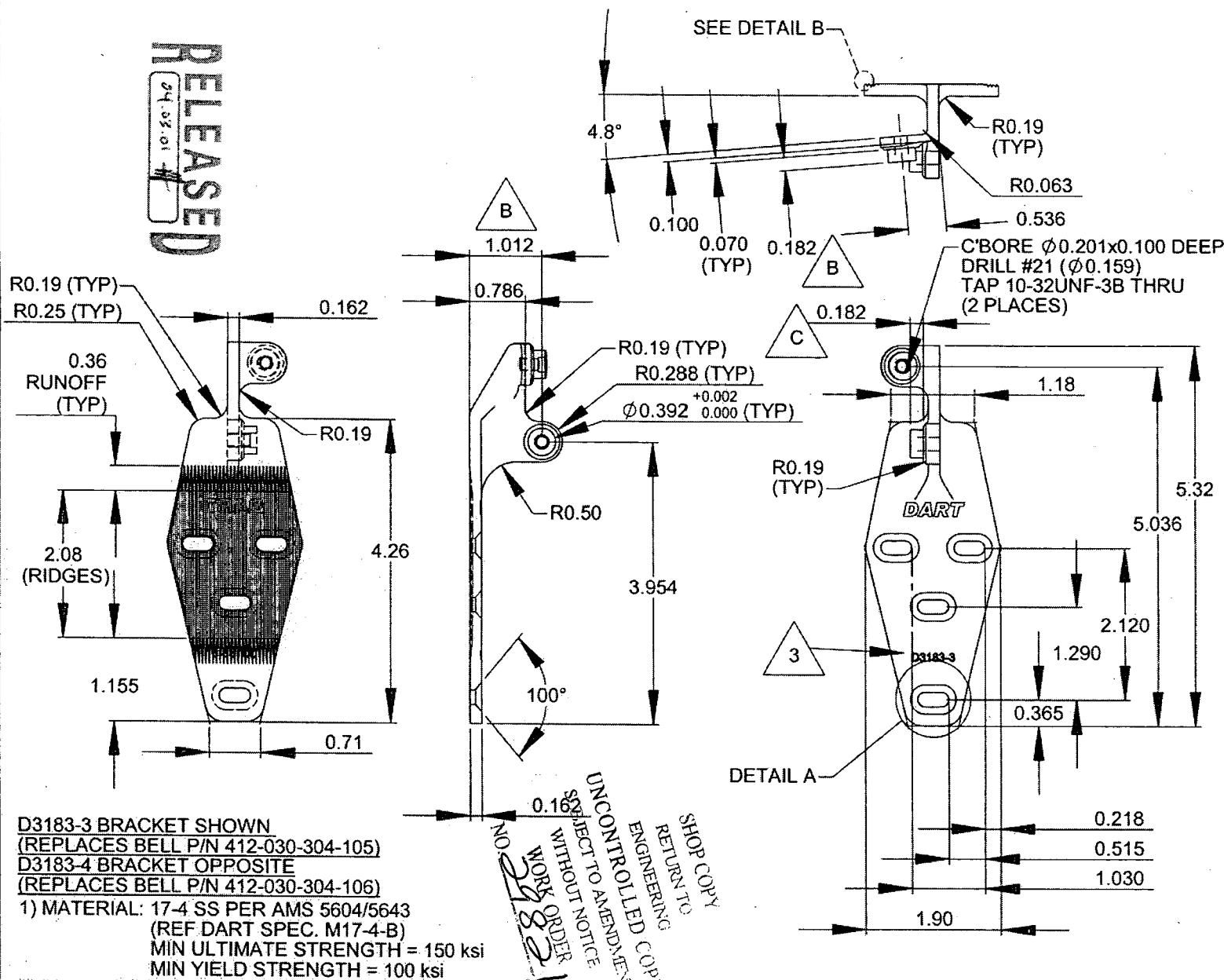
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<i>[Signature]</i>	<i>[Signature]</i>	D3183	SHEET 3 OF 4
DATE		TITLE	SCALE
04.02.17		BRACKET ASSEMBLY	1:2



2) BREAK ALL SHARP EDGES 0.005 TO 0.015
3) ENGRAVE DART P/N & LOGO AS SHOWN
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES

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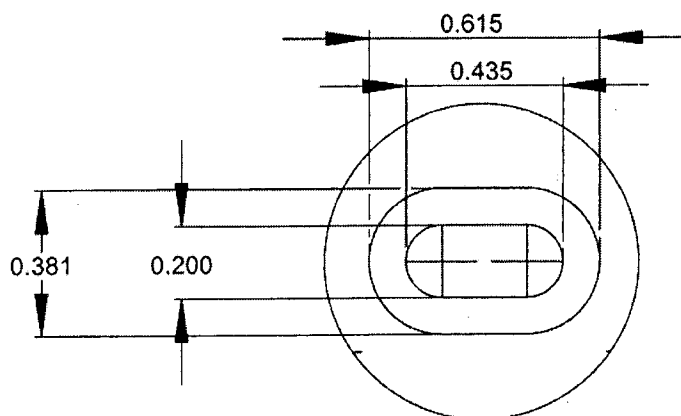
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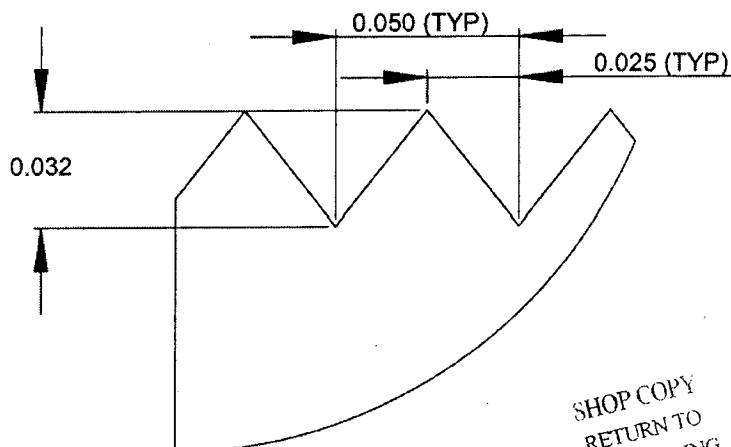


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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17	TITLE BRACKET ASSEMBLY	SCALE 1:1	

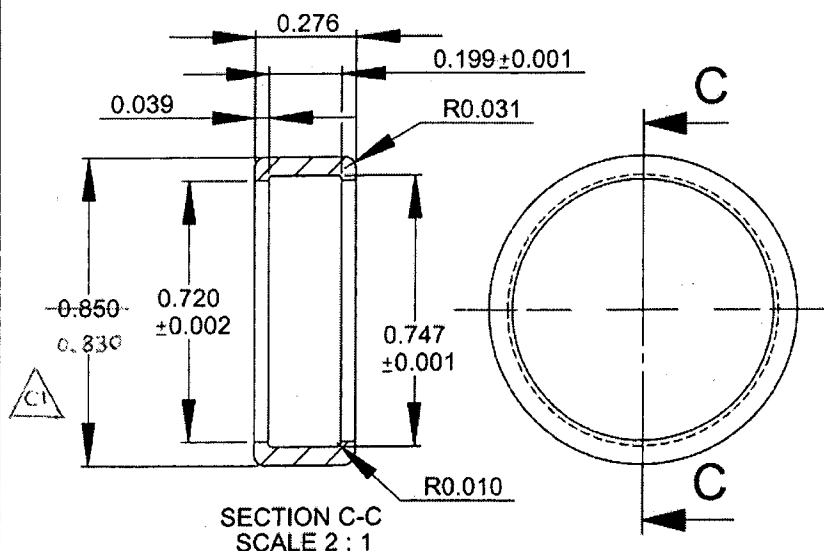


DETAIL A (2 : 1)

RELEASED
04.03.01 *[Signature]*



DETAIL B (20 : 1)



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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